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## **GUARDING AGAINST TERRORIST AND SECURITY THREATS**

### **Suggested Measures for Drinking Water**

The Office of Homeland Security established a five-tiered Homeland Security Advisory System to provide a national framework for notification about the nature and degree of terrorist threats. The system establishes a set of graduated threat conditions or threat levels that change in response to increases or decreases in terrorist threats.

The threat levels are color-coded, beginning with green, and increasing in severity through blue, yellow, orange, and red. While the threat may not be specific to water utilities, the water sector may consider themselves potential targets.

The following fact sheets contain suggested steps drinking water utilities should consider implementing in the areas of detection, preparedness, prevention, and protection as the threat levels change from one color to the next. The fact sheets are additive in that suggested measures at higher threat levels should also include those measures outlined in the fact sheets for lower threat levels.

### **Why are the EPA and the Maine Drinking Water Program offering these suggestions?**

Drinking water utilities are in the forefront of ensuring that our nation's water system infrastructure is protected against terrorist threats. The U.S. Environmental Protection Agency and the Drinking Water Programs around the country have developed these appropriate security measures that a water utility can utilize in order to improve security during various threat levels assigned by the Office of Homeland Security.

These suggestions should not be viewed as a complete source of information on protecting drinking water utilities. Facility Managers and utility security directors will need to take into account the full range of resources available to them and their facilities, as well as the specific nature of the threats, when responding to changes in threat condition levels. These fact sheets and other security information are available on our website [www.medwp.com](http://www.medwp.com). Any questions or concerns should be forwarded to your State Drinking Water Program security coordinator, who can be reached at the following address:

Bill Johnson  
Security Coordinator  
Drinking Water Program  
11 State House Station  
Augusta, ME 04333  
TEL: 207-287-5678  
E-mail: [william.johnson@maine.gov](mailto:william.johnson@maine.gov)  
Web Address: <http://www.medwp.com>

### Emergency Contact Numbers

- ❑ **Drinking Water Program (207-287-2070 or, after hours, 207-557-4214)**
- ❑ **Maine State Police (1-800-452-4664)**

CONDITION	SUGGEST MEASURES	
<b>LOW (GREEN)</b>  <b>Low risk of terrorist attack</b>	Detection	<ul style="list-style-type: none"> <li>▪ Monitor water quality at the source water, leaving the plant, and in distribution and storage systems as required by regulations.</li> <li>▪ Maintain disinfectant residuals as required by regulations.</li> <li>▪ Implement best management practices for optimizing drinking water treatment.</li> </ul>
	Preparedness	<ul style="list-style-type: none"> <li>▪ Prepare and/or revise emergency response plans to include continuity of operations. Test emergency response plans and exercise employee emergency phone rosters.</li> <li>▪ Establish communication and coordination protocol with local authorities, such as Local Emergency Planning Committee (LEPC), police and fire departments, HAZMAT teams, hospital, and other first responders. Identify who is responsible for which actions when threat level changes.</li> <li>▪ In order to prepare for potential increase in threat level, discuss measures needed at increased levels with local police and emergency response services.</li> <li>▪ Post emergency evacuation and place building plans in accessible, but secure, location near entrance for immediate access by law enforcement, fire response, and other first responders.</li> <li>▪ Back-up critical files such as plans and drawings, as-builts, sampling results, billing, and other critical information.</li> <li>▪ Conduct appropriate background investigations of staff, contractors, operators, and others with access to the facility.</li> </ul>
	Prevention	<ul style="list-style-type: none"> <li>▪ Prepare vulnerability assessments and revise utilities infrastructure changes (e.g-assets added/replaced or new countermeasures implemented).</li> <li>▪ Train staff in safety procedures, such as handling hazardous materials and maintaining and using self-contained breathing apparatus.</li> <li>▪ Secure equipment such as vehicles and spare parts.</li> </ul>
	Protection	<ul style="list-style-type: none"> <li>▪ Maintain positive control of those entering all critical areas.</li> <li>▪ Check all chemical deliveries for driver identification and verification of load.</li> <li>▪ Maintain vigilance and be alert to suspicious activity. Report any suspicious activity to appropriate authorities.</li> </ul>

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CONDITION	SUGGEST MEASURES	
<b>GUARDED (BLUE)</b>  General Risk of terrorist Attack	Detection	<ul style="list-style-type: none"> <li>▪ Instruct all appropriate staff to increase review of operational and analytical data with an eye towards detecting unusual variability (as an indicator of unexpected changes in the product). Variations due to natural or routine operational variability should be considered first.</li> <li>▪ Increase surveillance activities in source water area.</li> </ul>
	Preparedness	<ul style="list-style-type: none"> <li>▪ Communicate with local police and intelligence agencies, to monitor the threat to water utility personnel and facilities.</li> <li>▪ Post <i>monthly</i> employee reminders about events that constitute security violations and ensure employees understand notification protocol in the event of a security breach.</li> <li>▪ Increase unannounced security spot checks (e.g., verification of personal identification and door security) at access control points for critical facilities.</li> <li>▪ Review public notification protocols with employees. Brief customer services staff on any press releases. Customer service and water quality staff are to monitor customer complaints for unusual notices or requests.</li> <li>▪ Inventory spare parts and on-hand chemicals.</li> <li>▪ Back-up critical computer files and maintain back-up tapes for an increased period of time before destroying or over-writing.</li> <li>▪ Draft threat and incident communications pieces. Route through appropriate channels of review to ensure pieces are clear and consistent</li> </ul>
	Prevention	<ul style="list-style-type: none"> <li>▪ Secure buildings, rooms, and storage areas not in regular use. Maintain a list of secured areas or facilities and monitor activity in these areas.</li> <li>▪ Monitor requests for potentially sensitive information.</li> </ul>
	Protection	<ul style="list-style-type: none"> <li>▪ Limit access to mission critical sites.</li> </ul>

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<b>ELEVATED (YELLOW)</b>  <b>Significant Risk of Terrorist Attack</b>	Detection	<ul style="list-style-type: none"> <li>▪ Increase the frequency and extent of monitoring activities. Establish baseline monitoring results.</li> </ul>
	Preparedness	<ul style="list-style-type: none"> <li>▪ Practice communications protocol with local authorities</li> <li>▪ Post <i>weekly</i> employee reminders about events that constitute security violations and ensure employees understand notification protocol in the event of a security breach.</li> <li>▪ Inform personnel of the general threat situation and periodically update them as the situation changes. Provide in-depth briefing for security personnel (including contractors).</li> <li>▪ Conduct security audit of physical security assets, such as fencing and lights, and repair or replace missing/broken assets. Remove debris from along fence-lines that could be stacked to facilitate scaling.</li> <li>▪ Physically render all equipment and vehicles inoperable when not in-use, (e.g., lock steering wheels, secure keys, chain and padlock on front-end loaders, etc.).</li> <li>▪ Execute increased liaison with local police, intelligence and security agencies, to monitor the threat to water utility and personnel.</li> <li>▪ If neighborhood watch-type program is in place, notify the community and request increase awareness.</li> <li>▪ Review draft threat and incident communications pieces, brief media relations personnel of potential for press contact and/or issuance of release.</li> <li>▪ Identify sensitive populations within the service area, such as hospitals, nursing homes, daycare centers, schools, etc., for notification, as appropriate, in the event of a specific threat against the utility.</li> <li>▪ Contact neighboring water utilities to review and implement coordinated response actions and mutual aid during emergencies.</li> </ul>
	Prevention	<ul style="list-style-type: none"> <li>▪ Carefully review all facility tour requests before approving. If allowed, implement security measures to include list of names prior to tour, request identification of each attendee prior to tour, prohibit backpacks/duffle bags, cameras and identify parking restrictions.</li> <li>▪ On a daily basis, inspect the interior and exterior of buildings in regular use for suspicious activity or packages, signs of tampering, or indications of unauthorized entry. Utility field staff should conduct supplemental mission critical facility inspections as part of their routine duties, within their work areas.</li> <li>▪ Implement mailroom security procedures. All mail and packages go to a central, secure location and are inspected before distribution. Remind mailroom personnel of the need for heightened awareness when sorting and distributing all incoming mail. Follow guidance provided by the United States Postal Service.</li> </ul>
	Protection	<ul style="list-style-type: none"> <li>▪ Employees are to notify their supervisor about any security breaches/violations. The supervisor is responsible for determining whether to contact utility security or local law enforcement. Any Notification to outside agencies should go through the utility's normal chain-of-command.</li> <li>▪ Verify the identity of all personnel entering the water utility. Randomly check identification badges and cards of those on the premises.</li> <li>▪ At the discretion of the facility manager or security director, remove all vehicles and objects (e.g., trash containers) located within 25 meters of mission critical facility security perimeters and other sensitive activities specified in local plans.</li> <li>▪ Verify the security of critical business systems (e.g., Supervisory Control and Data Acquisition (SCADA), Internet, email, etc.) and remind staff to routinely change computer passwords.</li> </ul>

CONDITION	SUGGEST MEASURES	
<p><b>HIGH (ORANGE)</b></p> <p>High Risk of Terrorist Attack</p>	Detection	<ul style="list-style-type: none"> <li>Confirm that county and state health officials will inform water utilities of any potential waterborne illnesses.</li> </ul>
	Preparedness	<ul style="list-style-type: none"> <li>Post daily reminders for staff and contractors of the THREAT LEVEL ORANGE, along with a reminder of what events constitute security violations.</li> <li>Ensure employees are fully aware of the communication protocols with relevant law enforcement, public health, environmental protection, and emergency response organizations; and have access to utility emergency telephone numbers and contact information at all times.</li> <li>Report criminal threats, suspicious behavior, or attacks on water utilities immediately to local law enforcement officials, state health authorities, and others identified in the facility's emergency response plan.</li> <li>Evaluate the need for opening an emergency operations center.</li> </ul>
	Prevention	<ul style="list-style-type: none"> <li>Discontinue tours and prohibit public access to all operational facilities.</li> <li>Consider requesting increased law enforcement surveillance, particularly of critical assets and otherwise unprotected areas.</li> </ul>
	Protection	<ul style="list-style-type: none"> <li>Ensure water treatment/production facility is staffed at all times.</li> <li><b>Consider the need to</b> prohibit recreational use of surface water reservoirs.</li> <li>Limit mission critical facility access to essential employees and contractors.</li> <li>Increase security patrol activity to the maximum level sustainable and ensure tight security in the vicinity of mission critical facilities.</li> <li>Prosecute intruders, trespassers, and those detained for tampering to the fullest extent possible under applicable laws.</li> </ul>

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<b>SEVERE (RED)</b>  Severe Risk of Terrorist Attack	Detection	<ul style="list-style-type: none"> <li>▪ Ensure that list of sensitive populations within the service area is accurate and shared with appropriate public health officials.</li> </ul>
	Preparedness	<ul style="list-style-type: none"> <li>▪ Ensure that critical replacement parts are available and accessible.</li> <li>▪ Where appropriate, place back-up operational capacity on-line (Water Treatment Plant filters, turbines, etc.).</li> <li>▪ Inspect and practice activation of available emergency interconnections with neighboring water agencies.</li> <li>▪ Ensure key utility personnel are on duty.</li> <li>▪ Where appropriate, provide public notification for citizens to store emergency water supply or to implement other preparatory measures.</li> </ul>
	Prevention	<ul style="list-style-type: none"> <li>▪ Request increased law enforcement and/or security agency surveillance, particularly of critical assets and otherwise unprotected areas (e.g. consider if National Guard assistance is needed and make appropriate request).</li> <li>▪ Limit access to facilities and activities to essential personnel</li> </ul>
	Protection	<ul style="list-style-type: none"> <li>▪ Open emergency operations center(s) and notify local law enforcement and offices of emergency services.</li> <li>▪ Ensure existing security policies, procedures, and equipment are effectively implemented.</li> <li>▪ Recheck security of all on-site chemical storage and utilization areas.</li> <li>▪ Take steps to control access to all areas under the jurisdiction of the water utility. Consult with local law enforcement and the local FBI regarding the use of barriers to block access to critical facilities. Have barriers available and placed at critical locations as deemed useful and necessary.</li> <li>▪ Implement frequent and staggered inspections of the exterior of buildings (to include roof areas) and parking areas.</li> <li>▪ Re-check the security of critical business systems (e.g., SCADA, Internet, email, etc.) and have staff change computer passwords.</li> </ul>